

## Summary of Research to Inform Self-Management Programs Redesign

*Research conducted by the Vermont Department of Health, OneCare Vermont, and the Blueprint for Health between March and June 2020.*

The Blueprint and OneCare Vermont are using the transition of the Self-Management Programs as an opportunity to reimagine program objectives and investigate new opportunities for supporting self-management. This work began with research envisioned collaboratively. This research was organized in three parts:

- Literature reviews on diabetes and hypertension prevention and self-management programs conducted by the Vermont Department of Health
- Literature reviews on patient activation, use of technology, and use of incentives, conducted by OneCare Vermont
- Key informant interviews conducted by the Blueprint for Health.

Topline findings are presented below along with links to the full research reports.

Literature reviews: prevention and management of diabetes and hypertension

[Link to full diabetes prevention and management programs literature review](#)

[Link to full hypertension prevention and management programs literature review](#)

### Methods

The Vermont Department of Health conducted extensive literature searches leading to:

- Identification of 880 articles about diabetes prevention, 20 studies reviewed
- Identification of 1,000 articles about diabetes management, 27 studies reviewed
- Identification of 66 articles about hypertension prevention, 6 studies reviewed
- Identification of 1,403 articles about hypertension management, 14 studies reviewed

### Summary of diabetes prevention and management findings

- Programs studied typically focused on physical activity and diet with the goal of modest weight loss.
- Within this focus, modalities varied but many demonstrated success.
- Several technology-assisted programs met or exceeded DPRP standards. Such programs should be considered to address participation barriers including transportation, childcare, and mobility.
- Successful programs followed the pattern of more weight loss during and directly after the intervention, followed by moderate weight regain. However, in most cases, type 2 diabetes risk reduction remained significant.

## Summary of hypertension prevention and management findings

- Like the diabetes prevention and management programs, study protocols typically focused on physical activity and nutrition to reduce risk factors.
- Successful programs were multi-modal. Self-monitoring was a critical component (but was not sufficient on its own). Other components of successful programs included clinical or community support and/or education or counseling.
- Some successful studies relied on pharmacists, nurses, or community health coaches working with physicians in a team-based care model to deliver interventions. Physician skepticism was a barrier to program success but was overcome by demonstrating positive patient outcomes.

## Literature reviews: patient activation, use of technology, and use of incentives

[Link to presentation of literature review on patient activation, technology, incentives](#)

### Methods

OneCare conducted extensive literature searches, leading to:

- Identification of 136 patient activation articles, review of 93
- Identification of 24 technology articles, review of 24
- Identification of 49 incentives articles, review of 19

### Summary of Patient Activation Measure Findings

- The Patient Activation Measure is a proprietary product that measures a patient's knowledge, skill, and confidence in managing their health and health care. It is the only validated, evidenced-based tailoring tool. Creators envision it being used as a vital sign.
- For patients with hypertension, higher patient activation levels are associated with better medication adherence, knowledge of goal blood pressure, self-monitoring, and tracking via diary.
- Patient activation interventions can include motivational interviewing, audit and feedback, individualized care plans, and skill building. They have been shown to modestly improve A1c in adults with type 2 diabetes.
- Patient activation measure interventions are flexible and can happen in-person or via telehealth. They may also engage family or peer support.
- A personalized approach with tailored goals and/or action plans may address health literacy, problem-solving skills, depressive symptoms, hearing impairment, and more.

### Summary of Technology Findings

- Technology-supported interventions come in many flavors – from online programming that may include tailored learning paths, to patient portals, texting, apps, and even telephone calls.

- Success depends on the offering being more than education and information – that alone is insufficient to effect behavior.
- Technology-supported interventions are promising in their ability to both standardize and personalize learning and supports and they are scalable and cost effective.
- Asynchronous offerings help overcome participation barriers like work schedules, childcare availability, transportation, and mobility.
- People are more likely to stick with simpler technology-supported interventions.
- Downsides are few but include gaps in Internet accessibility and variation in user comfort levels.

#### Summary of Incentives Findings

- Incentives have two main roles – guiding the learning phase during the creation of habits and acknowledging efforts made in the stable phase.
- Incentives may help participants overcome barriers to activation participation. Some worry that they may unintentionally decrease intrinsic motivation.
- The CDC has endorsed use of food vouchers, transportation, gym memberships, and insurance premium discounts. Cash and gift cards to stores are also options.

#### Key Informant Interviews

[Link to Report on Key Informant Interviews](#)

#### Methods

In the first month of the COVID-19 crisis the Blueprint was able to conduct the following key informant interviews. Due to small sample size, the resulting insights should be used only directionally or with additional verification.

- 2 primary care provider interviews
- 4 individual and small group interviews engaging leaders and staff from Community Health Teams, local Self-Management Programs, and Lifestyle Medicine
- One informal focus group with CHT Leaders

#### Summary of key informant interview findings

- Weight loss is often the key change that could help slow or reverse disease progression. For that and many other reasons, providers want their patients to eat better and move more. Conversations about these goals can be uncomfortable.
- Nutrition and exercise classes are on offer, many are homegrown by local leaders in response to community demand.
- Providers tell us not to assume that any patient understands these conditions in depth – what they do to a body, why they are important to treat, how behaviors can change their course. Customizing information is essential.

- Understanding a patient's personal definition of health and their cultural context can help tailor effective interventions. New health behaviors may shift valued relationships, alternative sources of identity and belonging can support lasting change.
- There are moments when people are especially ready for change and we can work to identify those moments and use them – one example is getting a new prescription.
- Building confidence and creating small but concrete evidence that change is possible (e.g. testing blood sugar before and after taking a walk) can build momentum towards bigger shifts.
- Classes are effective because they are a shared experience, where participants witness and support each other. But the prospect of engaging in a class can also be daunting – some experience social anxiety or fear exposure. Others have not taken a class since school and imagine being graded and judged.
- Many prefer to engage one-on-one with a coach. This personal support can be a complete intervention or the beginning of engagement with a broader range of self-management supports.
- Patients are ready to engage online – or can get there fast with support.
- Local leaders are ready to move beyond most of the current self-management offerings. The Diabetes Prevention Program continues to be relevant and useful. Workplace tobacco cessation has also shown promise.